In re application of: Wenge ZHONG, et al. Application No. 10/736,289

Amendments to the Claims

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims:

1. (Amended) A compound of Formula I

wherein A is 0 or 5;

wherein Q is selected from $-W(R^5)_3$, $-WR^3C(O)R^5$, $-(C_1-C_4)$ alkyl-

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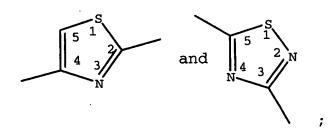
 CR^5 , $=(C_4-C_6)$ alkyl= $S[O]_{\Omega}R^5$, $SO_{1}^{R^5}$, substituted aryl, an unsubstituted or substituted monocyclic or bicyclic, non-aromatic carbocyclic ring, an unsubstituted or substituted monocyclic or bicyclic, heteroaryl ring, and an unsubstituted or substituted monocyclic or bicyclic or bicyclic or bicyclic, non-aromatic heterocyclic ring,

wherein a ring is unsubstituted or substituted with one or more groups selected from halo, (C₁-C₆) alkyl. (C₂-C₆) alkynyl, (C₂-C₆) alkenyl, -OR³, -O-(CH₂)₁₋₂-O-, -M(R⁵)₂.

-(C₁-C₆) alkyl-M(R⁵)₁, (C₁-C₆) haloalkyl, lower eyanoalkyl, -(C₁-C₆) alkyl-OR⁵, lower alkylaminoalkoxy, lower sminoalkoxyalkyl. -(C₁-C₁) alkyl-S(O)₁₃R³, -M(R⁵)-(C₁-C₁) alkyl-M(R³)₂, -M(R³) -(C₁-C₄) alkyl-OR⁵, -M(R⁵)-(C₁-C₁) alkyl-MRC(O)R⁵, -M(R³) -(C₁-C₄) alkyl-C(O)M(R³)₁, lower alkoxyalkyl, -S(O)₁₃R³, -SO₃MR³R³, -MR³S(O)₁₃R³, cyano, nitro, optionally substituted (C₁-C₁₀) cycloalkyl, optionally substituted 4-7 membered heterocyclyl, optionally substituted phenoxyalkyl, optionally substituted

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heterocyclyloxyalkyl, $-C(0)N(R^5)_2$, $-CO_2R^5$, $-CO_2N(R^5)_2$, $-SO_2NHC(0)R^5$, optionally substituted phenylalkyl, optionally substituted heterocyclylalkyl, $-NR^5C(0)N(R^5)_2$, $-NR^5C(0)R^5$, $-NR^5CO_2R^5$ and $-C(0)R^5$; wherein W is selected from



wherein n is 0, 1 or 2;

wherein R^1 is selected from H, $-0R^6$, halo, aryl, (C_1-C_8) alkyl, (C_2-C_8) alkenyl, (C_2-C_8) alkynyl, (C_1-C_8) perfluoroalkyl, $-NR^5_2$, $-(C_1-C_8)$ alkyl $-NR^5_2$, $-(C_1-C_8)$ alkyl $-0R^5$, $-S(0)_n$ -alkyl, $-S(0)_n$ -aryl, $-S(0)_n$ -heteroaryl, (C_3-C_10) cycloalkyl, nitro, heterocyclyl, $-NR^5SO_2R^5$, $-C(0)N(R^5)_2$, $-CO_2R^5$, $-(CR^5_2)_{1-8}$ aryl, $-(CR^5_2)_{1-8}$ heterocyclyl, $-NR^5C(0)N(R^5)_2$, $-NR^5C(0)R^5$, $-NR^5CO_2R^5$, and $-C(0)R^5$; wherein $-R^1$ and $-R^2$ may be joined to form a 5-10 membered saturated or partially unsaturated carbocyclic or heterocyclic ring;

wherein R^2 is selected from H, $-OR^6$, halo, aryl, (C_1-C_8) alkyl, (C_2-C_8) alkenyl, (C_2-C_8) alkynyl, (C_1-C_8) perfluoroalkyl, $-NR^5_2$, $-(C_1-C_8)$ alkyl $-NR^5_2$, $-(C_1-C_8)$ alkyl $-OR^5$, $-S(O)_n$ -alkyl, $-S(O)_n$ -aryl, $-S(O)_n$ -heteroaryl, (C_3-C_{10}) cycloalkyl, nitro, heterocyclyl, $-NR^5SO_2R^5$, $-C(O)N(R^5)_2$, $-CO_2R^5$, $-(CR^5_2)_{1-8}$ aryl, $-(CR^5_2)_{1-8}$ heterocyclyl, $-NR^5C(O)N(R^5)_2$, $-NR^5C(O)R^5$, $-NR^5CO_2R^5$, and $-C(O)R^5$; wherein R^3 is selected from H, $-OR^6$, halo, aryl, (C_1-C_8) alkyl, (C_2-C_8) alkenyl, (C_2-C_8) alkynyl, (C_1-C_8) perfluoroalkyl, $-NR^5_2$, $-(C_1-C_8)$ alkyl $-NR^5_2$, $-(C_1-C_8)$ alkyl $-OR^5$, $-S(O)_n$ -alkyl, $-S(O)_n$ -aryl, $-S(O)_n$ -heteroaryl, $-C_1$ -allyl, $-C_1$ -by cycloalkyl, nitro, heterocyclyl, $-NR^5SO_2R^5$,

 $-C(0)N(R^5)_2$, $-CO_2R^5$, $-(CR^5_2)_{1-8}ary1$, $-(CR^5_2)_{1-8}heterocycly1$, $-NR^5C(0)N(R^5)_2$, $-NR^5C(0)R^5$, $-NR^5CO_2R^5$, and $-C(0)R^5$; wherein R^2 and R^3 may be joined to form a 5-10 membered saturated or partially unsaturated carbocyclic or heterocyclic ring; wherein R^4 is independently selected from H, and $(C_1-C_6)alky1$;

wherein R⁵ is independently selected from H, lower alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, optionally substituted C₃-C₆ cycloalkyl, optionally substituted C₃-C₆ cycloalkyl-alkyl, lower alkylamino-lower alkyl, aryloxyalkyl, alkylcarbonylalkyl, and lower perfluoroalkyl; and

wherein R⁶ is independently selected from lower alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, optionally substituted C₃-C₆ cycloalkyl, optionally substituted C₃-C₆ cycloalkyl-alkyl, lower alkylamino-lower alkyl, aryloxyalkyl, alkylcarbonylalkyl, and lower perfluoroalkyl;

wherein each aryl, heteroaryl, cycloalkyl, and heterocyclyl moiety of any R^1 , R^2 , R^3 , R^5 , R^6 , and Q is optionally substituted with one or more groups selected from halo, NH_2 , -OH, $-CO_2H$, (C_1-C_6) alkylamino, (C_1-C_6) alkoxy, (C_1-C_6) alkoxyalkyl, (C_1-C_6) alkyl, (C_1-C_6) alkylamino, phenyl, and heterocyclyl;

and pharmaceutically acceptable derivatives salts thereof;

provided R^1 is not CF_3 when R^2 is ethoxycarbonyl, when R^3 is H, when W is thiazol-4-yl and when Q is 4-pyridyl or 2-chloro-4-pyridyl; further provided Q is not 4-pyridyl, when W is thiazol-2-yl, when R^1 , R^3 , and R^2 are H; further provided Q is not 2-nitro-5-furyl when W is thiazol-2-yl, when R^1 is methyl, when R^3 is H, and when R^2 is H; further

provided Q is not phenyl when W is thiazol-2-yl, when R^1 is methyl, when R^3 is methyl, and when R^2 is H; further provided Q is not phenyl, 3,4-diacetylphenyl or 3,4-dihydroxyphenyl, when W is thiazol-2-yl, when R^1 is H, when R^3 is H, and when R^2 is H; and further provided Q is not 3-cyano-6-methyl-2-oxo-1,2-dihydro-5-pyridyl, when W is thiazol-2-yl, when R^1 is methyl, when R^3 is H, and when R^2 is acetyl.

2. (Amended) A Compound of Claim 1 wherein Q is selected from

 $R^6 SO_2 - (C_1 - C_6) \, alkyl - , \qquad R^4 \ , \ substituted \ phenyl, \ and \\ substituted \ or \ unsubstituted \ 5-6 \ membered \ heteroaryl; \\ wherein \ R^4 \ is \ independently \ selected \ from \ H, \ and \ (C_1 - C_2) \, alkyl; \ and$

wherein R^6 is independently selected from (C_1-C_4) alkyl, optionally substituted phenyl- (C_1-C_2) alkyl, optionally substituted furyl- (C_1-C_2) -alkyl, optionally substituted C_3-C_6 cycloalkyl- (C_1-C_2) -alkyl, (C_1-C_3) alkylamino- (C_1-C_3) -alkyl-, phenyloxy- (C_1-C_3) alkyl-, (C_1-C_2) alkylcarbonyl- (C_1-C_2) alkyl- and optionally substituted heterocyclyl selected from pyridyl and thienyl; and pharmaceutically acceptable derivatives salts thereof.

3 (Amended) A Compound of Claim 2 wherein Q is selected from phenylsulfonylamino, N-methyl-N-(2-pyridylsulfonyl)amino, N-methyl-N-(3-pyridylsulfonyl)amino, N-methyl-N-(4-pyridylsulfonyl)amino, N-methyl-N-(2-thienylsulfonyl)amino, N-methyl-N-(phenylsulfonyl)amino, 2-pyridylsulfonylmethyl, 3-pyridylsulfonylmethyl, 4-pyridylsulfonylmethyl, 2-thienylsulfonylmethyl, phenylsulfonylmethyl, (1-methyl)-1-(phenylsulfonyl)ethyl, 4-chlorophenyl-sulfonylmethyl, 2-furylmethylsulfonylmethyl, 3-trifluoromethylbenzyl-

sulfonylmethyl, methylsulfonylmethyl, tert-butyl-sulfonylmethyl, 4-fluorobenzylsulfonylmethyl, 4-chlorophenyl-methylsulfonylmethyl, 2-thienyl, 3-(4-chlorophenylsulfonylmethyl)-2-thienyl, phenyl substituted with one or more substituents selected from hydroxyl, chloro, fluoro, methoxy, -O-CH₂-O-, amino, aminomethyl, methylsulfonyl, methyl, cyano, trifluoromethyl, and pyrrolyl,

unsubstituted pyridyl, and

- 4-pyridyl substituted with one or more substituents selected from chloro, fluoro, methyl, ethyl, -NH₂, methoxy, ethoxy, -OH, -CO₂H, phenoxyethylamino, methylamino, butylamino, isobutylamino, benzylamino, 4-fluorobenzylamino, 2-thienylethylamino, 3-pyridylmethylamino, 2-pyridylmethylamino, 2-furylmethylamino, 4-methoxybenzylamino, diethylamino, cyclopropylmethylamino, cyclopentylmethylamino, ethylaminoethylamino, diethylaminoethylamino, isopropylaminoethylamino, methylcarbonylaminoethylamino, methylcarbonylaminoethylamino, pyrrolidinyl, piperazinyl, piperidinyl, morpholinyl and azetidinyl; and pharmaceutically acceptable derivatives salts thereof.
- 4. (Amended) A Compound of Claim 1, and pharmaceutically acceptable derivatives salts thereof, wherein W is thiazol-4-yl.
- 5. (Amended) A Compound of Claim 1 wherein R^1 is selected from (C_1-C_6) alkyl, $-(C_1-C_4)$ alkyl- $N(R^5)_2$, $-(C_1-C_4)$ alkyl- OR^5 , $-(C_3-C_5)$ cycloalkyl, and $-CF_3$;
- wherein R^2 is selected from H, halo, (C_1-C_3) alkyl, $-NR^5_2$, $-OR^6$, $-(C_1-C_3)$ alkyl- OR^5 , $-C(O)N(R^5)_2$, $-CO_2R^5$, $-(CH_2)_{1-3}$ -(5-6 membered saturated or partially unsaturated) heterocyclyl, $-NHC(O)R^5$, and $-C(O)R^5$;

wherein R¹ and R² may be joined together with the pyridone ring to form optionally substituted 2-oxo-1,5,7,8-tetrahydro-2H-[1,6]naphthyridine, optionally substituted 5,6,7,8-tetrahydro-1H-[1,6]naphthyridin-2-one, optionally substituted 5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, optionally substituted 5,6,7,8-tetrahydro-1H-quinolin-2-one, optionally substituted 7,8-dihydro-1H-quinolin-2-one, 7,8-dihydro-(1H,6H)-quinoline-2,5-dione or 1,5,7,8-tetrahydro-pyrano[4,3-b]pyridin-2-one; wherein R³ is H;

wherein R⁵ is independently selected from H, C₁-C₄-alkyl, optionally substituted phenyl, optionally substituted benzyl, optionally substituted heterocyclyl selected from piperazinyl, morpholinyl, pyrrolidinyl, and piperidinyl, optionally substituted pyridyl-(C₁-C₃)-alkyl, optionally substituted pyridyl-(C₁-C₃)-alkyl, 4-morpholinyl-(C₁-C₃)-alkyl, pyrrolidinyl-(C₁-C₃)-alkyl, 1-piperidinyl-(C₁-C₃)-alkyl, optionally substituted C₃-C₆ cycloalkyl-(C₁-C₃)-alkyl, -(C₁-C₃)-alkyl-N-((C₁-C₃)-alkyl)₂ and -(C₁-C₃)-alkyl-NH-(C₁-C₃)-alkyl;

and pharmaceutically acceptable derivatives salts thereof.

6. (Amended) A Compound of Claim 5 wherein R¹ is selected from methyl, ethyl, propyl, isopropyl, hydroxyethyl, dimethylaminomethyl, benzyloxymethyl, 4-methoxybenzyloxymethyl, methoxymethyl, cyclopropyl, and -CF₃; wherein R² is selected from H, bromo, methyl, amino, isobutylamino, hydroxymethyl, aminocarbonyl, 4-methoxybenzylaminocarbonyl, 2-pyridylmethylaminocarbonyl, ethylaminoethylaminocarbonyl, isopropylaminoethylaminocarbonyl, cyclopropylmethylaminocarbonyl, isobutylaminocarbonyl, ethoxycarbonyl, tert-butoxycarbonyl, 4-

morpholinylethoxycarbonyl, 1-pyrrolidinylethoxycarbonyl,

1-piperidinylethoxycarbonyl, diethylaminopropoxycarbonyl, carboxyl, 1,2,5,6-tetrahydro-1-pyridylmethyl, 1-piperidinylmethyl, 1-methyl-4-piperazinylmethyl, methylcarbonylamino, isobutylcarbonylamino, and 1-methyl-4-piperazinylcarbonyl;

wherein R¹ and R² may be joined together with the pyridone ring to form 6-benzyloxycarbonyl-2-oxo-1,5,7,8-tetrahydro-2H-[1,6]naphthyridine, 5,6,7,8-tetrahydro-1H-[1,6]naphthyridin-2-one, 7-Boc-5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, 7-ethyl-5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, 5-methyl-7,8-dihydro-1H-quinolin-2-one, 5-propylamino-5,6,7,8-tetrahydro-1H-quinolin-2-one, 5-propylimino-5,6,7,8-tetrahydro-1H-quinolin-2-one, 7,8-dihydro-(1H,6H)-quinoline-2,5-dione or 1,5,7,8-tetrahydro-pyrano[4,3-b]pyridin-2-one; and pharmaceutically acceptable derivatives salts thereof.

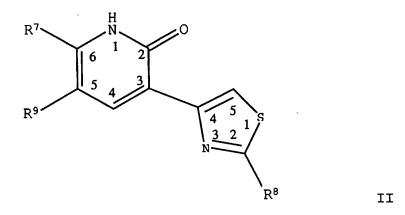
7. (Amended) A Compound of Claim 4, and pharmaceutically acceptable derivatives salts thereof, wherein A is O; wherein Q is selected from N-methyl-N-(phenylsulfonyl) amino, 2-pyridylsulfonylmethyl, 2-thienylsulfonylmethyl, phenylsulfonylmethyl, (1-methyl)-1-(phenylsulfonyl) ethyl, 4-chlorophenyl-sulfonylmethyl, 2-furylmethylsulfonylmethyl, methylsulfonylmethyl, tert-butyl-sulfonylmethyl, 4-fluorobenzylsulfonylmethyl, 2-thienyl, phenyl substituted with one or more substituents selected from

chloro, fluoro, and -O-CH₂-O-, unsubstituted pyridyl, and

4-pyridyl substituted with one or more substituents selected from chloro, fluoro, -NH₂, methoxy, ethoxy, phenoxyethylamino, methylamino, methyl, ethyl, butylamino, isobutylamino, benzylamino, 4-fluorobenzylamino, 2-thienylethylamino, 3-pyridylmethylamino, 2-pyridylmethylamino, 2-

furylmethylamino, 4-methoxybenzylamino, diethylamino, cyclopropylmethylamino, cyclopentylmethylamino, ethylaminoethylamino, diethylaminoethylamino, isopropylaminoethylamino, methylcarbonylaminoethylamino, methylcarbonylmethylamino, pyrrolidinyl, piperazinyl, piperidinyl, morpholinyl and azetidinyl; wherein R1 is selected from methyl, ethyl, propyl, isopropyl, dimethylaminomethyl, hydroxyethyl, benzyloxymethyl, 4-methoxy-benzyloxymethyl, methoxymethyl, cyclopropyl, and -CF3; wherein R2 is selected from H, bromo, methyl, amino, isobutylamino, hydroxymethyl, aminocarbonyl, 4methoxybenzylaminocarbonyl, 2-pyridylmethylaminocarbonyl, ethylaminoethylaminocarbonyl, isopropylaminoethylaminocarbonyl, cyclopropylmethylaminocarbonyl, isobutylaminocarbonyl, ethoxycarbonyl, tert-butoxycarbonyl, 4morpholinylethoxycarbonyl, 1-pyrrolidinylethoxycarbonyl, 1-piperidinylethoxycarbonyl, diethylaminopropoxycarbonyl, carboxyl, 1,2,5,6-tetrahydro-1-pyridylmethyl, 1piperidinylmethyl, 1-methyl-4-piperazinylmethyl, methylcarbonylamino, isobutylcarbonylamino, and 1-methyl-4-piperazinylcarbonyl; wherein R1 and R2 may be joined together with the pyridone ring to form 6-benzyloxycarbonyl-2-oxo-1,5,7,8tetrahydro-2H-[1,6]naphthyridine, 5,6,7,8-tetrahydro-1H-[1,6]naphthyridin-2-one, 7-Boc-5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, 7-ethyl-5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, 5-methyl-7,8-dihydro-1Hquinolin-2-one, 5-propylamino-5,6,7,8-tetrahydro-1Hquinolin-2-one, 5-propylimino-5,6,7,8-tetrahydro-1Hquinolin-2-one, 7,8-dihydro-(1H,6H)-quinoline-2,5-dione or 1,5,7,8-tetrahydro-pyrano[4,3-b]pyridin-2-one; and wherein R³ is H.

- 8. (Amended) A Compound of Claim 1 wherein A is O; and pharmaceutically acceptable derivatives salts thereof.
- 9. (Amended) A compound of Claim 1 having Formula II



wherein R^7 is selected from $-(C_1-C_3)$ alkyl, $-(C_1-C_3)$ alkyl- $N(R^{10})_2$, $-(C_1-C_3)$ alkyl- OR^{10} , $-(C_3-C_5)$ cycloalkyl, and $-CF_3$; wherein R^8 is selected from $R^{10}SO_2-(C_1-C_6)$ alkyl-, $R^{11}SO_2NH-R^{11}O_2S$

CH₃, substituted phenyl, and substituted or unsubstituted 5-6 membered heteroaryl;

wherein R^9 is selected from H, halo, (C_1-C_3) alkyl, $-NR^{10}_2$, - (C_1-C_3) alkyl- OR^{10} , $-C(O)N(R^{10})_2$, $-CO_2R^{10}$, $(CH_2)_{1-3}$ -(5-6 membered saturated or partially unsaturated heterocyclyl, $-NHC(O)R^{10}$, and $-C(O)R^{10}$;

wherein R^{10} is independently selected from H, (C_1-C_4) alkyl, optionally substituted phenyl- (C_1-C_2) alkyl, optionally substituted furyl- (C_1-C_2) - alkyl, optionally substituted C_3-C_6 cycloalkyl- (C_1-C_2) - alkyl, (C_1-C_3) alkylamino- (C_1-C_3) - alkyl-, phenyloxy- (C_1-C_3) alkyl-, (C_1-C_2) alkylcarbonyl- (C_1-C_2) alkyl- and optionally substituted heterocyclyl selected from pyridyl and thienyl; and

wherein R^{11} is independently selected from (C_1-C_4) alkyl, optionally substituted phenyl, optionally substituted phenyl- (C_1-C_2) alkyl, optionally substituted furyl- (C_1-C_2) -alkyl, optionally substituted C_3-C_6 cycloalkyl- (C_1-C_2) -alkyl, (C_1-C_3) alkylamino- (C_1-C_3) -alkyl-, phenyloxy- (C_1-C_3) alkyl-, (C_1-C_2) alkylcarbonyl- (C_1-C_2) alkyl, and optionally substituted heterocyclyl selected from pyridyl and thienyl;

and pharmaceutically acceptable derivatives salts thereof; provided R^7 is not CF_3 when R^9 is ethoxycarbonyl and when R^8 is 4-pyridyl or 2-chloro-4-pyridyl.

10. (Amended) A Compound of Claim 9 wherein R⁷ is selected from methyl, ethyl, propyl, isopropyl, dimethylaminomethyl, benzyloxymethyl, hydroxyethyl, 4-methoxy-benzyloxymethyl, methoxymethyl, cyclopropyl, and -CF₃; wherein R⁸ is selected from N-methyl-N-(phenylsulfonyl) amino, 2-pyridylsulfonylmethyl, 2-thienylsulfonylmethyl, phenylsulfonylmethyl, (1-methyl)-1-(phenylsulfonyl)ethyl, 4-chlorophenyl-sulfonylmethyl, 2-furylmethylsulfonylmethyl, methylsulfonylmethyl, tert-butyl-sulfonylmethyl, 4-fluorobenzylsulfonylmethyl, 2-thienyl, phenyl substituted with one or more substituents selected from chloro, fluoro, and -O-CH₂-O-, unsubstituted pyridyl, and

4-pyridyl substituted with one or more substituents selected from chloro, fluoro, -NH2, methoxy, ethoxy, phenoxyethylamino, methylamino, methyl, ethyl, butylamino, isobutylamino, benzylamino, 4-fluorobenzylamino, 2-thienylethylamino, 3-pyridylmethylamino, 2-pyridylmethylamino, 2-furylmethylamino, 4-methoxybenzylamino, diethylamino, cyclopropylmethylamino, cyclopentylmethylamino, ethylaminoethylamino, diethylamino,

isopropylaminoethylamino, methylcarbonylaminoethylamino, methylcarbonylmethylamino, pyrrolidinyl, piperazinyl, piperidinyl, morpholinyl and azetidinyl; and wherein R9 is selected from H, bromo, methyl, amino, isobutylamino, hydroxymethyl, aminocarbonyl, 4methoxybenzylaminocarbonyl, 2-pyridylmethylaminocarbonyl, ethylaminoethylaminocarbonyl, isopropylaminoethylaminocarbonyl, cyclopropylmethylaminocarbonyl, isobutylaminocarbonyl, ethoxycarbonyl, tert-butoxycarbonyl, 4morpholinylethoxycarbonyl, 1-pyrrolidinylethoxycarbonyl, 1-piperidinylethoxycarbonyl, diethylaminopropoxycarbonyl, carboxyl, 1,2,5,6-tetrahydro-1-pyridylmethyl, 1piperidinylmethyl, 1-methyl-4-piperazinylmethyl, methylcarbonylamino, isobutylcarbonylamino, and 1-methyl-4-piperazinylcarbonyl; and pharmaceutically acceptable derivatives salts thereof

11. (Amended) A compound of Claim 1 having Formula III

III

wherein R^8 is selected from $R^{11}SO_2-(C_1-C_6)$ alkyl-, $R^{11}SO_2NH-R^{11}O_2S$

 $\dot{\text{CH}}_3$, substituted phenyl, and substituted or unsubstituted 5-6 membered heteroaryl;

wherein ring A together with the pyridone ring forms optionally substituted 2-oxo-1,5,7,8-tetrahydro-2H-

[1,6]naphthyridine, optionally substituted 5,6,7,8-tetrahydro-1H-[1,6]naphthyridin-2-one, optionally substituted 5,6,7,8-tetrahydro-1H-quinolin-2-one, optionally substituted 5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, or 1,5,7,8-tetrahydro-pyrano[4,3-b]pyridin-2-one; and

wherein R^{11} is independently selected from (C_1-C_4) alkyl, optionally substituted phenyl, optionally substituted phenyl- (C_1-C_2) alkyl, optionally substituted furyl- (C_1-C_2) -alkyl, optionally substituted C_3-C_6 cycloalkyl- (C_1-C_2) -alkyl, (C_1-C_3) alkylamino- (C_1-C_3) -alkyl-, phenyloxy- (C_1-C_3) alkyl, (C_1-C_2) alkylcarbonyl- (C_1-C_2) alkyl, and optionally substituted heterocyclyl selected from pyridyl and thienyl;

and pharmaceutically acceptable derivatives salts thereof.

12. (Amended) A Compound of Claim 11 wherein R⁸ is selected from N-methyl-N-(phenylsulfonyl) amino, 2-pyridylsulfonylmethyl, 2-thienylsulfonylmethyl, phenylsulfonylmethyl, (1-methyl)-1-(phenylsulfonyl) ethyl, 4-chlorophenyl-sulfonylmethyl, 2-furylmethylsulfonylmethyl, methylsulfonylmethyl, tert-butyl-sulfonylmethyl, 4-fluorobenzylsulfonylmethyl, 2-thienyl, phenyl substituted with one or more substituents selected from chloro, fluoro, and -O-CH₂-O-,

unsubstituted pyridyl, and

4-pyridyl substituted with one or more substituents selected from chloro, fluoro, -NH₂, methoxy, ethoxy, phenoxyethylamino, methylamino, methyl, ethyl, butylamino, isobutylamino, benzylamino, 4-fluorobenzylamino, 2-thienylethylamino, 3-pyridylmethylamino, 2-pyridylmethylamino, 2-furylmethylamino, 4-methoxybenzylamino, diethylamino, cyclopropylmethylamino, cyclopentylmethylamino, ethylaminoethylamino, diethylamino,

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isopropylaminoethylamino, methylcarbonylaminoethylamino, methylcarbonylmethylamino, pyrrolidinyl, piperazinyl, piperidinyl, morpholinyl and azetidinyl; and pharmaceutically acceptable derivatives salts thereof.

13 (Amended) A Compound of Claim 12 and pharmaceutically acceptable derivatives salts thereof selected from:

Phenylmethyl 2-oxo-3-(2-(4-pyridyl)(1,3-thiazol-4-yl))-1,5,6,7,8-pentahydropyridino[3,2-c]pyridine-6carboxylate;

- 3-(2-(4-Pyridyl)-1,3-thiazol-4-yl)-1,7,8-trihydro-5H-pyrano[4,3-b]pyridin-2-one;
- 7-Ethyl-3-(2-(4-pyridyl)(1,3-thiazol-4-yl))-1,5,6,7,8-pentahydropyridino[3,2-c]pyridin-2-one;
- tert-Butyl 2-oxo-3-(2-(4-pyridyl)(1,3-thiazol-4-yl))1,5,6,7,8-pentahydropyridino[3,2-c]pyridine-6carboxylate;
- 3-(2-(4-Pyridyl)-1,3-thiazol-4-yl)-1,5,6,7,8pentahydropyridino[3,2-c]pyridin-2-one, dihydrochloride; and
- 6-Methyl-3-(2-pyridin-4-yl-thiazol-4-yl)-5,6,7,8-tetrahydro-1H-[1,6]naphthyridin-2-one.
- 14. (Amended) A compound of Formula I'

$$\begin{array}{c|c}
R^1 & H \\
\hline
 & 1 & 2 \\
\hline
 & 5 & 4 & 3 \\
\hline
 & R^3 & Q
\end{array}$$

I'

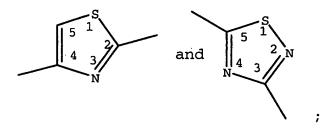
wherein A is O or S;

wherein Q is selected from $-N(R^5)_2$, $-NR^5C(O)R^5$, $-(C_1-C_8)alkyl-$

 OR^5 , $-(C_1-C_8)$ alkyl-S(O) nR^6 , SO_2R^6 , substituted aryl, an unsubstituted or substituted monocyclic or bicyclic, non-aromatic carbocyclic ring, an unsubstituted or substituted monocyclic or bicyclic, heteroaryl ring, and an unsubstituted or substituted monocyclic or bicyclic, non-aromatic heterocyclic ring,

wherein a ring is unsubstituted or substituted with one or more groups selected from halo, (C_1-C_8) alkyl, $(C_2 C_8$) alkynyl, (C_2-C_8) alkenyl, $-OR^5$, $-O-(CH_2)_{1-2}-O-$, $-N(R^5)_2$, $-(C_1-C_8)$ alkyl- $N(R^5)_2$, (C_1-C_8) haloalkyl, lower cyanoalkyl, $-(C_1-C_8)$ alkyl $-OR^5$, lower alkylaminoalkoxy, lower aminoalkoxyalkyl, $-(C_1-C_8)$ alkyl- $S(0)_nR^5$, $-N(R^5)$ - (C_1-C_8) alkyl-N(R⁵)₂, -N(R⁵) - (C_1-C_8) alkyl-OR⁵, -N(R⁵) - (C_1-C_8) C_8) alkyl-NHC(0) R^5 , -N(R^5) - (C_1 - C_8) alkyl-C(0) N(R^5)₂, lower alkoxyalkyl, $-S(0)_nR^5$, $-SO_2NR^5R^5$, $-NR^5S(0)_nR^5$, cyano, nitro, optionally substituted (C3-C10) cycloalkyl, optionally substituted aryl, optionally substituted 4-7 membered heterocyclyl, optionally substituted phenoxyalkyl, optionally substituted heterocyclyloxyalkyl, $-C(0)N(R^5)_2$, $-CO_2R^5$, $-CO_2N(R^5)_2$, -SO₂NHC(0)R⁵, optionally substituted phenylalkyl, optionally substituted heterocyclylalkyl,

 $-NR^5C(O)N(R^5)_2$, $-NR^5C(O)R^5$, $-NR^5CO_2R^5$ and $-C(O)R^5$; wherein W is selected from



wherein n is 0, 1 or 2;

wherein R¹ is selected from H, -OR⁶, halo, aryl, (C₁- C_8) alkyl, (C_2-C_8) alkenyl, (C_2-C_8) alkynyl, (C_1-C_8) C_8) perfluoroalkyl, $-NR^5_2$, $-(C_1-C_8)$ alkyl $-NR^5_2$, $-(C_1-C_8)$ alkyl $-NR^5_2$ $\label{eq:constraints} \text{OR}^5, \ -\text{S(O)}_n\text{-alkyl}, \ -\text{S(O)}_n\text{-aryl}, \ -\text{S(O)}_n\text{-heteroaryl}, \ (\text{C}_3\text{--}$ C₁₀) cycloalkyl, nitro, heterocyclyl, -NR⁵SO₂R⁵, $-C(0)N(R^5)_2$, $-CO_2R^5$, $-(CR^5_2)_{1-8}$ aryl, $-(CR^5_2)_{1-8}$ heterocyclyl, $-NR^5C(0)N(R^5)_2$, $-NR^5C(0)R^5$, $-NR^5CO_2R^5$, and $-C(0)R^5$; wherein R^1 and R^2 may be joined to form a 5-10 membered saturated or partially unsaturated carbocyclic or heterocyclic ring; wherein R² is selected from H, -OR⁶, halo, aryl, (C₁- C_8) alkyl, (C_2-C_8) alkenyl, (C_2-C_8) alkynyl, (C_1-C_8) C_8) perfluoroalkyl, $-NR^5_2$, $-(C_1-C_8)$ alkyl $-NR^5_2$, $-(C_1-C_8)$ alkyl- OR^5 , $-S(0)_n$ -alkyl, $-S(0)_n$ -aryl, $-S(0)_n$ -heteroaryl, $(C_3$ -C₁₀) cycloalkyl, nitro, heterocyclyl, -NR⁵SO₂R⁵, $-C(0)N(R^5)_2$, $-CO_2R^5$, $-(CR^5_2)_{1-8}$ aryl, $-(CR^5_2)_{1-8}$ heterocyclyl, - $NR^5C(O)N(R^5)_2$, $-NR^5C(O)R^5$, $-NR^5CO_2R^5$, and $-C(O)R^5$; wherein R³ is selected from H, -OR⁶, halo, aryl, (C₁- C_8) alkyl, (C_2-C_8) alkenyl, (C_2-C_8) alkynyl, (C_1-C_8) C_8) perfluoroalkyl, $-NR_2^5$, $-(C_1-C_8)$ alkyl $-NR_2^5$, $-(C_1-C_8)$ alkyl- OR^5 , $-S(0)_n$ -alkyl, $-S(0)_n$ -aryl, $-S(0)_n$ -heteroaryl, $(C_3-$ C₁₀) cycloalkyl, nitro, heterocyclyl, -NR⁵SO₂R⁵, $-C(0)N(R^{5})_{2}$, $-CO_{2}R^{5}$, $-(CR^{5}_{2})_{1-8}aryl$, $-(CR^{5}_{2})_{1-8}heterocyclyl$, - $NR^5C(0)N(R^5)_2$, $-NR^5C(0)R^5$, $-NR^5CO_2R^5$, and $-C(0)R^5$; wherein R^2 and R³ may be joined to form a 5-10 membered saturated or partially unsaturated carbocyclic or heterocyclic ring; wherein R4 is independently selected from H, and (C1-C₆)alkyl; wherein R⁵ is independently selected from H, lower alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, optionally substituted C3-C6 cycloalkyl, optionally substituted C3-C6 cycloalkyl-

alkyl, lower aminoalkyl, aryl-(C1-C6)alkylamino-(C1-

 C_6) alkyl, (C_1-C_6) alkylamino- (C_1-C_6) alkyl, aryloxyalkyl, alkylcarbonylalkyl, and lower perfluoroalkyl; and wherein R⁶ is independently selected from lower alkyl, optionally substituted aryl, optionally substituted aryl-(C₁-C₆) alkyl, optionally substituted heterocyclyl, optionally substituted heterocyclyl-(C1-C6) alkyl, optionally substituted C3-C6 cycloalkyl, optionally substituted C_3-C_6 cycloalkyl- (C_1-C_6) alkyl, (C_1-C_6) C_6) alkylamino- (C_1-C_6) alkyl, aryloxy- (C_1-C_6) alkyl, $(C_1$ C_6) alkylcarbonyl- (C_1-C_6) alkyl, and lower perfluoroalkyl; wherein each aryl, heteroaryl, cycloalkyl, and heterocyclyl moiety of any R¹, R², R³, R⁵, R⁶, and Q is optionally substituted with one or more groups selected from halo, - NH_2 , -OH, oxo, $-CO_2H$, (C_1-C_6) alkylamino, (C_1-C_6) alkoxy, (C_1-C_6) alkoxyalkyl, (C_1-C_6) alkyl, $di(C_1-C_6)$ alkylamino, phenyl, and heterocyclyl;

and pharmaceutically acceptable derivatives salts thereof;

provided R¹ is not CF₃ when R² is ethoxycarbonyl, when R³ is H, when W is thiazol-4-yl and when Q is 4-pyridyl or 2-chloro-4-pyridyl; further provided Q is not 4-pyridyl, when W is thiazol-2-yl, when R¹, R³, and R² are H; further provided Q is not 2-nitro-5-furyl when W is thiazol-2-yl, when R¹ is methyl, when R³ is H, and when R² is H; further provided Q is not phenyl when W is thiazol-2-yl, when R¹ is methyl, when R³ is methyl, and when R² is H; further provided Q is not phenyl, 3,4-diacetylphenyl or 3,4-dihydroxyphenyl, when W is thiazol-2-yl, when R¹ is H, when R³ is H, and when R² is H; and further provided Q is not 3-cyano-6-methyl-2-oxo-1,2-dihydro-5-pyridyl, when W is thiazol-2-yl, when R¹ is methyl, when R³ is H, and when R² is acetyl.

15. (Amended) \underline{A} Compound of Claim 14 wherein Q is selected from

R⁶SO₂-(C₁-C₆)alkyl-, R⁴ , substituted phenyl, and substituted or unsubstituted 5-6 membered heteroaryl; wherein R⁴ is independently selected from H, and (C₁-C₂)alkyl; and

wherein R^6 is independently selected from (C_1-C_4) alkyl, optionally substituted phenyl, optionally substituted phenyl- (C_1-C_2) alkyl, optionally substituted furyl- (C_1-C_2) -alkyl, optionally substituted C_3-C_6 cycloalkyl- (C_1-C_2) -alkyl, (C_1-C_3) alkylamino- (C_1-C_3) -alkyl-, phenyloxy- (C_1-C_3) alkyl-, (C_1-C_2) alkylcarbonyl- (C_1-C_2) alkyl- and optionally substituted heterocyclyl selected from pyridyl and thienyl; and pharmaceutically acceptable derivatives salts thereof.

16. (Amended) A Compound of Claim 15 wherein Q is selected from phenylsulfonylamino, N-methyl-N-(2-pyridylsulfonyl)amino, N-methyl-N-(4-pyridylsulfonyl)amino, N-methyl-N-(4-pyridylsulfonyl)amino, N-methyl-N-(2-thienylsulfonyl)amino, N-methyl-N-(phenylsulfonyl)amino, 2-pyridylsulfonylmethyl, 3-pyridylsulfonylmethyl, 4-pyridylsulfonylmethyl, 2-thienylsulfonylmethyl, 3-thienylsulfonylmethyl, phenylsulfonylmethyl, (1-methyl)-1-(phenylsulfonyl)ethyl, 4-chlorophenyl-sulfonylmethyl, 2-furylmethylsulfonylmethyl, 3-trifluoromethylbenzyl-sulfonylmethyl, methylsulfonylmethyl, tert-butyl-sulfonylmethyl, 4-fluorobenzylsulfonylmethyl, 4-chlorophenyl-methylsulfonylmethyl, 2-thienyl, 3-(4-chlorophenylsulfonylmethyl)-2-thienyl, phenyl substituted with one or more substituents selected from

hydroxyl, chloro, fluoro, methoxy, -O-CH2-O-, amino, aminomethyl, methylsulfonyl, methyl, cyano, trifluoromethyl, and pyrrolyl, unsubstituted pyridyl, and

- 4-pyridyl substituted with one or more substituents selected from chloro, fluoro, methyl, ethyl, -NH₂, methoxy, ethoxy, -OH, -CO₂H, phenoxyethylamino, methylamino, dimethylamino, butylamino, isobutylamino, benzylamino, 4-fluorobenzylamino, 2-thienylethylamino, 3-pyridylmethylamino, 2-pyridylmethylamino, 2-furylmethylamino, 4-methoxybenzylamino, diethylamino, cyclopropylmethylamino, cyclopentylmethylamino, ethylaminoethylamino, diethylamino, isopropylaminoethylamino, methylcarbonylaminoethylamino, methylcarbonylmethylamino, pyrrolidinyl, piperazinyl, piperidinyl, morpholinyl and azetidinyl; and pharmaceutically acceptable derivatives salts thereof.
- 17. (Amended) A Compound of Claim 14, and pharmaceutically acceptable derivatives salts thereof, wherein W is thiazol-4-yl.
- 18. (Amended) \underline{A} Compound of Claim 14 wherein R^1 is selected from (C_1-C_6) alkyl, $-(C_1-C_4)$ alkyl-N(R⁵)₂, $-(C_1-C_4)$ alkyl-OR⁵, (C_3-C_4) C₅)cycloalkyl and -CF₃; wherein R⁵ is independently selected from H, C₁-C₅-alkyl, optionally substituted phenyl, optionally substituted benzyl, optionally substituted pyridyl- (C_1-C_3) -alkyl, optionally substituted thienyl- (C_1-C_3) C_3)-alkyl, optionally substituted piperazinyl- (C_1-C_3) -alkyl, 4-morpholinyl- (C_1-C_3) -alkyl, optionally substituted pyrrolidinyl- (C_1-C_3) -alkyl, optionally substituted piperidinyl-(C1-C3)-alkyl, optionally substituted C3-C6 cycloalkyl- (C_1-C_3) -alkyl, amino- (C_1-C_4) -alkyl-, benzylamino- (C_1-C_3) -alkyl-, $[N-(C_1-C_3)$ -alkyl-N-benzylamino] - (C_1-C_3) -alkyl- (C_1-C_3) -alkyl-N- $((C_1-C_3)$ -alkyl)₂, - (C_1-C_3) -alkyl-NH- (C_1-C_3) alkyl and optionally substituted heterocyclyl selected from piperazinyl, morpholinyl, pyrrolidinyl and piperidinyl; and pharmaceutically acceptable derivatives salts thereof.

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- 19 (Amended) A Compound of Claim 18 wherein R¹ is selected from methyl, ethyl, propyl, isopropyl, dimethylaminomethyl, 1-pyrrolidinyltheyl, benzyloxymethyl, benzyloxymethyl, hydroxyethyl, 4-methoxy-benzyloxymethyl, methoxymethyl, cyclopropyl and -CF₃; and pharmaceutically acceptable derivatives salts thereof.
- 20. (Amended) A Compound of Claim 14 wherein R2 is selected from H, halo, (C_1-C_3) alkyl, $-NR^5_2$, $-OR^6$, $-(C_1-C_3)$ alkyl $-OR^5$, $-(C_1-C_3)$ C_3) alkyl-NR⁵₂, -C(0)N(R⁵)₂, -CO₂R⁵, -(CH₂)₁₋₃-(5-6 membered saturated or partially unsaturated) heterocyclyl, 5-6 membered saturated or partially unsaturated heterocycly1, -NHC(0) R^5 , and -C(0) R^5 ; wherein R^5 is independently selected from H, C₁-C₅-alkyl, optionally substituted phenyl, optionally substituted benzyl, optionally substituted pyridyl- (C_1-C_3) -alkyl, optionally substituted thienyl- (C_1-C_3) -alkyl, optionally substit C_3)-alkyl, optionally substituted piperazinyl-(C_1 - C_3)-alkyl, 4-morpholinyl- (C_1-C_3) -alkyl, optionally substituted pyrrolidinyl- (C_1-C_3) -alkyl, optionally substituted piperidinyl-(C1-C3)-alkyl, optionally substituted C3-C6 cycloalkyl- (C_1-C_3) -alkyl, amino- (C_1-C_4) -alkyl-, benzylamino- (C_1-C_3) -alkyl-, $[N-(C_1-C_3)$ -alkyl-N-benzylamino]- (C_1-C_3) -alkyl- $(C_1-C_3)-alkyl-N-((C_1-C_3)-alkyl)_2$, $-(C_1-C_3)-alkyl-NH-(C_1-C_3)-alkyl-NH-(C_1-C_3)$ alkyl and optionally substituted heterocyclyl selected from piperazinyl, morpholinyl, pyrrolidinyl and piperidinyl; and pharmaceutically acceptable derivatives salts thereof.
- 21. (Amended) A Compound of Claim 20 wherein R² is selected from H, bromo, methyl, hydroxymethyl, 1,2,5,6-tetrahydro-1-pyridylmethyl, 1-piperidinylmethyl, 1-methyl-4-piperazinylmethyl, (N-diethylaminoethyl-N-methyl)aminomethyl, (N-dimethylaminoethyl-N-ethyl)aminomethyl, 4,5-dihydro-oxazol-2-yl, 5-methyl-4,5-dihydro-oxazol-2-yl, 2-furyl, amino, isobutylamino, 3-

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methylbutylamino, ethylcarbonyl, aminocarbonyl, 4-
methoxybenzylaminocarbonyl, 2-pyridylmethylaminocarbonyl, 4-
pyridylmethylaminocarbonyl, dimethylaminocarbonyl,
ethylaminoethylaminocarbonyl,
isopropylaminoethylaminocarbonyl,
cyclopropylmethylaminocarbonyl, isobutylaminocarbonyl,
ethoxycarbonyl, propoxycarbonyl, 1-methylpropoxycarbonyl,
butoxycarbonyl, iso-butoxycarbonyl, tert-butoxycarbonyl, 2-
thienylethoxycarbonyl, 4-morpholinylethoxycarbonyl, (4-
piperidinyl)methoxycarbonyl, (1-piperazinyl)ethoxycarbonyl,
(1-methyl-piperidin-3-yl)oxycarbonyl, (1-methyl-piperidin-4-
yl) oxycarbonyl, (1-ethyl-piperidin-3-yl) oxycarbonyl, (1-
methyl-pyrrolidin-3-yl)oxycarbonyl, 1-
pyrrolidinylethoxycarbonyl, 2-oxo-pyrrolidin-1-
ylethoxycarbonyl, 2-oxo-pyrrolidin-1-ylpropoxycarbonyl, 1-
methyl-2-pyrrolidinylethoxycarbonyl, 1-
piperidinylethoxycarbonyl, diethylaminoethoxycarbonyl, di-
isopropylaminoethoxycarbonyl, (N-ethyl-N-
benzylamino) ethoxycarbonyl, diethylaminopropoxycarbonyl,
dimethylaminoethoxycarbonyl, 2-(dimethylamino)-1-
(methyl) ethoxycarbonyl, 2-(diethylamino)-1-
(methyl)ethoxycarbonyl, carboxyl, methylcarbonylamino,
isobutylcarbonylamino, methylaminomethylcarbonylamino,
dimethylaminomethylcarbonylamino, tert-
butylaminomethylcarbonylamino, (1-amino-2-
methylpropyl) carbonylamino, 1-
piperidinylmethylcarbonylamino, 1-
piperidinylethylcarbonylamino, 1-
piperidinylpropylcarbonylamino, aminomethylcarbonylamino and
1-methyl-4-piperazinylcarbonyl; and pharmaceutically
acceptable derivatives salts thereof.
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22. (Amended) \underline{A} Compound of Claim 14 wherein R^1 and R^2 may be joined together with the pyridone ring to form optionally

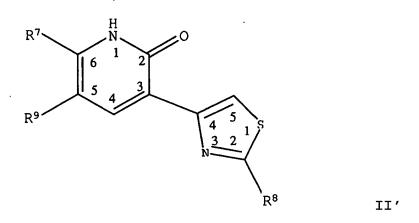
substituted 2-oxo-1,5,7,8-tetrahydro-2H-[1,6]naphthyridine, optionally substituted 5,6,7,8-tetrahydro-1H[1,6]naphthyridin-2-one, optionally substituted 5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, optionally substituted 5,6,7,8-tetrahydro-1H-quinolin-2-one, optionally substituted 5,6,7,8-tetrahydro-1H-quinolin-2-one, 7,8-dihydro-(1H,6H)-quinoline-2,5-dione or 1,5,7,8-tetrahydro-pyrano[4,3-b]pyridin-2-one; and pharmaceutically acceptable derivatives salts thereof.

- 23. (Amended) A Compound of Claim 22, wherein R¹ and R² are joined together with the pyridone ring to form 6-benzyloxycarbonyl-2-oxo-1,5,7,8-tetrahydro-2H-[1,6]naphthyridine, 5,6,7,8-tetrahydro-1H-[1,6]naphthyridin-2-one, 7-Boc-5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, 7-ethyl-5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, 5-methyl-7,8-dihydro-1H-quinolin-2-one, 5-propylamino-5,6,7,8-tetrahydro-1H-quinolin-2-one, 5-propylimino-5,6,7,8-tetrahydro-1H-quinolin-2-one, 7,8-dihydro-(1H,6H)-quinoline-2,5-dione or 1,5,7,8-tetrahydro-pyrano[4,3-b]pyridin-2-one; and pharmaceutically acceptable derivatives salts thereof.
- 24. (Amended) A Compound of Claim 14 wherein R³ is H; and pharmaceutically acceptable derivatives salts thereof.
- 25. (Amended) A Compound of Claim 14 wherein A is 0; and pharmaceutically acceptable derivatives salts thereof.
- 26. (Amended) A Compound of Claim 14, and pharmaceutically acceptable derivatives salts thereof, wherein A is O; wherein Q is selected from N-methyl-N-(phenylsulfonyl) amino, 2-pyridylsulfonylmethyl, 2-thienylsulfonylmethyl, phenylsulfonylmethyl, (1-methyl)-1-(phenylsulfonyl) ethyl, 4-chlorophenyl-sulfonylmethyl, 2-furylmethylsulfonylmethyl,

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methylsulfonylmethyl, tert-butyl-sulfonylmethyl, 4-
fluorobenzylsulfonylmethyl, 2-thienyl, phenyl substituted
with one or more substituents selected from
   chloro, fluoro, and -O-CH2-O-,
 unsubstituted pyridyl, and
 4-pyridyl substituted with one or more substituents
   selected from chloro, fluoro, -NH2, methoxy, ethoxy,
   methyl, ethyl, phenoxyethylamino, methylamino,
   dimethylamino, butylamino, isobutylamino, benzylamino, 4-
   fluorobenzylamino, 2-thienylethylamino, 3-
   pyridylmethylamino, 2-pyridylmethylamino, 2-
   furylmethylamino, 4-methoxybenzylamino, diethylamino,
   cyclopropylmethylamino, cyclopentylmethylamino,
   ethylaminoethylamino, diethylaminoethylamino,
   isopropylaminoethylamino, methylcarbonylaminoethylamino,
   methylcarbonylmethylamino, pyrrolidinyl, piperazinyl,
   piperidinyl, morpholinyl and azetidinyl;
wherein R1 is selected from methyl, ethyl, propyl,
   isopropyl, dimethylaminomethyl, hydroxyethyl,
   benzyloxymethyl, 4-methoxy-benzyloxymethyl,
   methoxymethyl, cyclopropyl, and -CF3;
wherein R<sup>2</sup> is selected from H, bromo, methyl, amino,
   isobutylamino, hydroxymethyl, aminocarbonyl, 4-
   methoxybenzylaminocarbonyl, 2-pyridylmethylaminocarbonyl,
   ethylaminoethylaminocarbonyl,
   isopropylaminoethylaminocarbonyl,
   cyclopropylmethylaminocarbonyl, isobutylaminocarbonyl,
   ethoxycarbonyl, tert-butoxycarbonyl, 4-
   morpholinylethoxycarbonyl, 1-pyrrolidinylethoxycarbonyl,
   1-piperidinylethoxycarbonyl, diethylaminopropoxycarbonyl,
   carboxyl, 1,2,5,6-tetrahydro-1-pyridylmethyl, 1-
   piperidinylmethyl, 1-methyl-4-piperazinylmethyl,
   methylcarbonylamino, isobutylcarbonylamino, and 1-methyl-
   4-piperazinylcarbonyl;
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wherein R¹ and R² may be joined together with the pyridone ring to form 6-benzyloxycarbonyl-2-oxo-1,5,7,8-tetrahydro-2H-[1,6]naphthyridine, 5,6,7,8-tetrahydro-1H-[1,6]naphthyridin-2-one, 7-Boc-5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, 7-ethyl-5,6,7,8-tetrahydro-1H-[1,7]naphthyridin-2-one, 5-methyl-7,8-dihydro-1H-quinolin-2-one, 5-propylamino-5,6,7,8-tetrahydro-1H-quinolin-2-one, 5-propylimino-5,6,7,8-tetrahydro-1H-quinolin-2-one, 7,8-dihydro-(1H,6H)-quinoline-2,5-dione or 1,5,7,8-tetrahydro-pyrano[4,3-b]pyridin-2-one; and wherein R³ is H.

27. (Amended) A compound of Claim 14 having Formula II'



wherein R^7 is selected from $-(C_1-C_3)$ alkyl, $-(C_1-C_3)$ alkyl- $N(R^{10})_2$, $-(C_1-C_3)$ alkyl- OR^{10} , $-(C_3-C_5)$ cycloalkyl, and $-CF_3$; wherein R^8 is selected from $R^{10}SO_2-(C_1-C_6)$ alkyl-, $R^{11}SO_2NH-R^{11}O_2S$

 $\dot{C}H_3$, substituted phenyl, and substituted or unsubstituted 5-6 membered heteroaryl;

wherein R⁹ is selected from H, halo, (C_1-C_3) alkyl, $-NR^{10}_2$, $-(C_1-C_3)$ alkyl $-OR^{10}$, $-C(O)N(R^{10})_2$, $-CO_2R^{10}$, $(CH_2)_{1-3}-(5-6)$ membered saturated or partially unsaturated heterocyclyl, $-NHC(O)R^{10}$, and $-C(O)R^{10}$;

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wherein R^{10} is independently selected from H, (C_1-C_4) alkyl, optionally substituted phenyl, optionally substituted phenyl- (C_1-C_2) alkyl, optionally substituted furyl- (C_1-C_2) -alkyl, optionally substituted C_3-C_6 cycloalkyl- (C_1-C_2) -alkyl, (C_1-C_3) alkylamino- (C_1-C_3) -alkyl-, phenyloxy- (C_1-C_3) alkyl-, (C_1-C_2) alkylcarbonyl- (C_1-C_2) alkyl- and optionally substituted heterocyclyl selected from pyridyl and thienyl; and

wherein R^{11} is independently selected from (C_1-C_4) alkyl, optionally substituted phenyl, optionally substituted phenyl- (C_1-C_2) alkyl, optionally substituted furyl- (C_1-C_2) -alkyl, optionally substituted C_3-C_6 cycloalkyl- (C_1-C_2) -alkyl, (C_1-C_3) alkylamino- (C_1-C_3) -alkyl-, phenyloxy- (C_1-C_3) alkyl-, (C_1-C_2) alkylcarbonyl- (C_1-C_2) alkyl, and optionally substituted heterocyclyl selected from pyridyl and thienyl;

and pharmaceutically acceptable derivatives salts thereof; provided R⁷ is not CF₃ when R⁹ is ethoxycarbonyl and when R⁸ is 4-pyridyl or 2-chloro-4-pyridyl.

28. (Amended) A Compound of Claim 27 wherein R⁷ is selected from methyl, ethyl, propyl, isopropyl, dimethylaminomethyl, 1-pyrrolidinyltheyl, benzyloxymethyl, benzyloxyethyl, hydroxyethyl, 4-methoxy-benzyloxymethyl, methoxymethyl, cyclopropyl and -CF₃; wherein R⁸ is selected from N-methyl-N-(phenylsulfonyl)amino, 2-pyridylsulfonylmethyl, 2-thienylsulfonylmethyl, phenylsulfonylmethyl, (1-methyl)-1-(phenylsulfonyl)ethyl, 4-chlorophenyl-sulfonylmethyl, 2-furylmethylsulfonylmethyl, methylsulfonylmethyl, tert-butyl-sulfonylmethyl, 4-fluorobenzylsulfonylmethyl, 2-thienyl, phenyl substituted with one or more substituents selected from

chloro, fluoro, and -O-CH₂-O-, unsubstituted pyridyl, and

4-pyridyl substituted with one or more substituents selected from chloro, fluoro, -NH2, methoxy, ethoxy, methyl, ethyl, phenoxyethylamino, methylamino, butylamino, isobutylamino, dimethylamino, benzylamino, 4fluorobenzylamino, 2-thienylethylamino, 3pyridylmethylamino, 2-pyridylmethylamino, 2furylmethylamino, 4-methoxybenzylamino, diethylamino, cyclopropylmethylamino, cyclopentylmethylamino, ethylaminoethylamino, diethylaminoethylamino, isopropylaminoethylamino, methylcarbonylaminoethylamino, methylcarbonylmethylamino, pyrrolidinyl, piperazinyl, piperidinyl, morpholinyl and azetidinyl; and wherein R9 is selected from H, bromo, methyl, hydroxymethyl, 1,2,5,6-tetrahydro-1-pyridylmethyl, 1-piperidinylmethyl, 1-methyl-4-piperazinylmethyl, (N-diethylaminoethyl-Nmethyl) aminomethyl, (N-dimethylaminoethyl-Nethyl)aminomethyl, 4,5-dihydro-oxazol-2-yl, 5-methyl-4,5dihydro-oxazol-2-yl, 2-furyl, amino, isobutylamino, 3methylbutylamino, ethylcarbonyl, aminocarbonyl, 4methoxybenzylaminocarbonyl, 2-pyridylmethylaminocarbonyl, 4-pyridylmethylaminocarbonyl, dimethylaminocarbonyl, ethylaminoethylaminocarbonyl, isopropylaminoethylaminocarbonyl, cyclopropylmethylaminocarbonyl, isobutylaminocarbonyl, ethoxycarbonyl, propoxycarbonyl, 1-methylpropoxycarbonyl, butoxycarbonyl, iso-butoxycarbonyl, tert-butoxycarbonyl, 2-thienylethoxycarbonyl, 4-morpholinylethoxycarbonyl, (4piperidinyl)methoxycarbonyl, (1piperidinyl) ethoxycarbonyl, (1piperazinyl)ethoxycarbonyl, (1-methyl-piperidin-3yl)oxycarbonyl, (1-methyl-piperidin-4-yl)oxycarbonyl, (1ethyl-piperidin-3-yl)oxycarbonyl, (1-methyl-pyrrolidin-3yl)oxycarbonyl, 1-pyrrolidinylethoxycarbonyl, 2-oxopyrrolidin-1-ylethoxycarbonyl, 2-oxo-pyrrolidin-1ylpropoxycarbonyl, 1-methyl-2-pyrrolidinylethoxycarbonyl, 1-piperidinylethoxycarbonyl, diethylaminoethoxycarbonyl, di-isopropylaminoethoxycarbonyl, (N-ethyl-Nbenzylamino) ethoxycarbonyl, diethylaminopropoxycarbonyl, dimethylaminoethoxycarbonyl, 2-(dimethylamino)-1-(methyl) ethoxycarbonyl, 2-(diethylamino)-1-(methyl) ethoxycarbonyl, carboxyl, methylcarbonylamino, isobutylcarbonylamino, methylaminomethylcarbonylamino, dimethylaminomethylcarbonylamino, tertbutylaminomethylcarbonylamino, (1-amino-2methylpropyl)carbonylamino, 1piperidinylmethylcarbonylamino, 1piperidinylethylcarbonylamino, 1piperidinylpropylcarbonylamino, aminomethylcarbonylamino and 1-methyl-4-piperazinylcarbonyl; and pharmaceutically acceptable derivatives salts thereof.

- 29. (Amended) \underline{A} Compound of Claim 27 wherein R^7 is selected from methyl, ethyl, propyl, and isopropyl.
- 30. (Amended) A Compound of Claim 27 wherein R⁸ is selected from phenylsulfonylmethyl and 4-pyridyl substituted with one or more substituents selected from chloro, fluoro, -NH₂, methoxy, ethoxy, phenoxyethylamino, methylamino, dimethylamino, methyl, ethyl, butylamino, isobutylamino, benzylamino, 4-fluorobenzylamino, 2-thienylethylamino, 3-pyridylmethylamino, 2-pyridylmethylamino, 2-furylmethylamino, 4-methoxybenzylamino, diethylamino, cyclopropylmethylamino, cyclopentylmethylamino, ethylaminoethylamino, diethylaminoethylamino, isopropylaminoethylamino, methylcarbonylaminoethylamino, methylcarbonylaminoethylamino, pyrrolidinyl, piperazinyl, piperidinyl, morpholinyl and azetidinyl.

31. (Amended) A Compound of Claim 27 wherein R^9 is selected from methyl, hydroxymethyl, 1,2,5,6-tetrahydro-1-pyridylmethyl, 1-piperidinylmethyl, 1-methyl-4-piperazinylmethyl, (Ndiethylaminoethyl-N-methyl)aminomethyl, (Ndimethylaminoethyl-N-ethyl)aminomethyl, 4,5-dihydro-oxazol-2-yl, 5-methyl-4,5-dihydro-oxazol-2-yl, 2-furyl, amino, isobutylamino, 3-methylbutylamino, ethylcarbonyl, aminocarbonyl, 4-methoxybenzylaminocarbonyl, 2pyridylmethylaminocarbonyl, 4-pyridylmethylaminocarbonyl, dimethylaminocarbonyl, ethylaminoethylaminocarbonyl, isopropylaminoethylaminocarbonyl, cyclopropylmethylaminocarbonyl, isobutylaminocarbonyl, ethoxycarbonyl, propoxycarbonyl, 1-methylpropoxycarbonyl, butoxycarbonyl, iso-butoxycarbonyl, tert-butoxycarbonyl, 2thienylethoxycarbonyl, 4-morpholinylethoxycarbonyl, (4piperidinyl)methoxycarbonyl, (1-piperidinyl)ethoxycarbonyl, (1-piperazinyl)ethoxycarbonyl, (1-methyl-piperidin-3y1)oxycarbonyl, (1-methyl-piperidin-4-yl)oxycarbonyl, (1ethyl-piperidin-3-yl)oxycarbonyl, (1-methyl-pyrrolidin-3yl)oxycarbonyl, 1-pyrrolidinylethoxycarbonyl, 2-oxopyrrolidin-1-ylethoxycarbonyl, 2-oxo-pyrrolidin-1ylpropoxycarbonyl, 1-methyl-2-pyrrolidinylethoxycarbonyl, 1piperidinylethoxycarbonyl, diethylaminoethoxycarbonyl, diisopropylaminoethoxycarbonyl, (N-ethyl-Nbenzylamino) ethoxycarbonyl, diethylaminopropoxycarbonyl, dimethylaminoethoxycarbonyl, 2-(dimethylamino)-1-(methyl)ethoxycarbonyl, 2-(diethylamino)-1-(methyl)ethoxycarbonyl, carboxyl, methylcarbonylamino, isobutylcarbonylamino, methylaminomethylcarbonylamino, dimethylaminomethylcarbonylamino, tertbutylaminomethylcarbonylamino, (1-amino-2methylpropyl)carbonylamino, 1piperidinylmethylcarbonylamino, 1piperidinylethylcarbonylamino, 1piperidinylpropylcarbonylamino, aminomethylcarbonylamino and 1-methyl-4-piperazinylcarbonyl; and pharmaceutically acceptable derivatives salts thereof.

- 32. (Amended) A Compound of Claim 27 and pharmaceutically acceptable derivatives salts thereof selected from:
 - 6-Isopropyl-5-methyl-3-(2-pyrindin-4-yl-thiazol-4-yl)-1H-pyridin-2-one;
 - 6-Ethyl-5-isopropionyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1H-pyridin-2-one;
 - 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-(2-oxo-pyrrolidin-1-yl)-ethyl ester;
 - 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-diethylamino-ethyl ester;
 - 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-pyrrolidin-1-yl-ethyl ester;
 - 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-diethylamino-1-methyl-ethyl ester;
 - 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 1-ethyl-piperidin-3-yl ester;
 - 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-dimethylamino-ethylester;
 - 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-dimethylamino-1-methyl-ethyl ester;

- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 1-methyl-piperidin-3-yl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 1-ethyl-pyrrolidin-3-yl ester;
- 5-(2-Benzenesulfonylmethyl-thiazol-4-yl)-2-isopropyl-6-oxo-1,6-pyridine-3-carboxylic acid 2-diethylamino-ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6dihydro-pyridine-3-carboxylic acid piperidin-4-ylmethyl ester;
- 5-(2-Benzenesulfonylmethyl-thiazol-4-yl)-2-isopropyl-6-oxo-1,6-pyridine-3-carboxylic acid 2-diethylamino-1-methylethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-(benzyl-methyl-amino)-ethyl ester;
- 5-(2-Benzenesulfonylmethyl-thiazol-4-yl)-2-isopropyl-6-oxo-1,6-pyridine-3-carboxylic acid 2-diethylamino-propyl ester;
- 5-(2-Benzenesulfonylmethyl-thiazol-4-yl)-2-isopropyl-6-oxo-1,6-pyridine-3-carboxylic acid 2-(1-methyl-pyrrolidin-2yl)-ethyl ester;
- 5-[2-(2-Dimethylamino-pyridin-4-yl)-thiazol-4-yl]-2isopropyl-6-oxo-1,6-dihydro-pyridine-3-carboxylic acid ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-piperazin-1-yl-ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6dihydro-pyridine-3-carboxylic acid 2-(2-oxo-pyrrolidin-1yl)-propyl ester;

- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 1-methyl-pyrrolidin-3-yl ester;
- 3-(2-Benzenesulfonylmethyl-thiazol-4-yl)-6-isopropyl-5-methyl-1H-pyridin-2-one;
- 3-(2-Benzenesulfonylmethyl-thiazol-4yl)-6-ethyl-5-propionyl-1H-pyridin-2-one;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-morpholin-4-yl-ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid phenethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid piperidin-4-ylmethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-thiophen-2-yl-ethyl ester;
- 5-(4,5-Dihydro-oxazol-2-yl)-6-isopropyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1H-pyridin-2-one;
- 5-{[(2-Dimethylamino-ethyl)-ethyl-amino]-methyl}-6-ethyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1H-pyridin-2-one;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-piperidin-1-yl-ethyl ester;
- 5-{[(2-Diethylamino-ethyl)-methyl-amino]-methyl}-6-ethyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1H-pyridin-2-one;
- 2-(2-Hydroxy-ethyl)-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid ethyl ester;
- 2-Amino-N-[2-ethyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridin-3-yl]-acetamide;
- 2-tert-Butylamino-N-[2-ethyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridin-3-yl]-acetamide;

6-Ethyl-5-(3-methyl-butylamino)-3-(2-pyridin-4-yl-thiazol-4yl)-1H-pyridin-2-one; Ethyl 2-ethyl-6-oxo-5-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylate; Ethyl-2-ethyl-6-oxo-5-{2-[(thienylsulfonyl)methyl](1,3thiazol-4-yl)}-1,6-dihydro-pyridine-3-carboxylate; Ethyl-2-ethyl-6-oxo-5-{2-[(phenylsulfonyl)methyl](1,3thiazol-4-yl)}-1,6-dihydro-pyridine-3-carboxylate; Ethyl-6-oxo-5-{2-[(phenylsulfonyl)methyl](1,3-thiazol-4yl)}-2-(trifluoromethyl)-1,6-dihydro-pyridine-3carboxylate; Ethyl-6-oxo-5-{2-[(2-pyridylsulfonyl)methyl](1,3-thiazol-4y1)}-2-(trifluoromethyl)-1,6-dihydro-pyridine-3carboxylate; Ethyl-6-oxo-5-{2-[(2-thienylsulfonyl)methyl](1,3-thiazol-4yl)}-2-(trifluoromethyl)-1,6-dihydro-pyridine-3carboxylate; Ethyl 2-isopropyl-6-oxo-5-(2-(4-pyridyl)(1,3-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylate; Ethyl 2-isopropyl-6-oxo-5-{2-[(thienylsulfonyl)methyl](1,3thiazol-4-yl)}-1,6-dihydro-pyridine-3-carboxylate; Ethyl 2-isopropyl-6-oxo-5-{2-[(phenylsulfonyl)methyl](1,3thiazol-4-yl)}-1,6-dihydro-pyridine-3-carboxylate; Ethyl 2-propyl-6-oxo-5-(2-(4-pyridyl)(1,3-thiazol-4-yl)-1,6dihydro-pyridine-3-carboxylate; Ethyl 2-propyl-6-oxo-5-{2-[(phenylsulfonyl)methyl](1,3thiazol-4-yl)}-1,6-dihydro-pyridine-3-carboxylate; Ethyl 2-propyl-6-oxo-5-{2-[(thienylsulfonyl)methyl](1,3thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate; Ethyl 6-oxo-2-[(phenylmethoxy)methyl]-5-(2-(4-pyridyl)(1,3thiazol-4-yl))-1,6-dihydropyridine-3-carboxylate;

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Ethyl 6-oxo-2-[(phenylmethoxy)methyl]-5-{2-
   [(phenylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6-
  dihydropyridine-3-carboxylate;
Ethyl 2-methyl-6-oxo-5-{2-[(2-thienylsulfonyl)methyl](1,3-
  thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;
Ethyl 5-[2-({{(4-fluorophenyl)methyl}sulfonyl}methyl)(1,3-
  thiazol-4-yl)]-2-methyl-6-oxo-1,6-dihydropyridine-3-
  carboxylate;
Ethyl 5-[2-({[(4-fluorophenyl)methyl]sulfonyl}methyl)(1,3-
   thiazol-4-yl)]-2-methyl-6-oxo-1,6-dihydropyridine-3-
   carboxylate;
(Ethyl 2-methyl-6-oxo-5-\{2-[(2-
   thienylsulfonyl)methyl]methyl](1,3-thiazol-4-yl)}-1,6-
   dihydropyridine-3-carboxylate;
Ethyl 2-methyl-6-oxo-5-{2-(phenylthiomethyl)(1,3-thiazol-4-
   yl)}-1,6-dihydropyridine-3-carboxylate;
Ethyl 5-[2-(2-\text{chloro}(4-\text{pyridyl}))(1,3-\text{thiazol}-4-\text{yl})-2-\text{methyl}-
   6-oxo-1,6-dihydropyridine-3-carboxylate;
Ethyl 5-(2-{[(2-furylmethyl)sulfonyl]methyl}(1,3-thiazol-4-
   y1))-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
Ethyl 5-(2-{[(2-furylmethyl)sulfonyl]methyl}(1,3-thiazol-4-
   yl))-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate
Ethyl 5-[2-(2-ethyl(4-pyridyl))(1,3-thiazol-4-yl)-2-methyl-
   6-oxo-1,6-dihydropyridine-3-carboxylate;
Ethyl 2-\text{methyl}-5-(2-(2-(2-\text{methylpropyl})\text{amino})-4-\text{pyridinyl})-
   1,3-thiazol-4-yl)-6-oxo-1,6-dihydropyridine-3-
   carboxylate;
Ethyl 2-methyl-6-oxo-5-(2-(2-((3-pyridinylmethyl)amino)-4-
   pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-
   carboxylate;
Ethyl 2-methyl-6-oxo-5-(2-(2-((phenylmethyl)amino)-4-
   pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-
   carboxylate;
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Ethyl 2-methyl-5-(2-(2-((2-((1-
  methylethyl)amino)ethyl)amino)-4-pyridinyl)-1,3-thiazol-
  4-yl)-6-oxo-1,6-dihydropyridine-3-carboxylate;
Ethyl 5-(2-(2-(diethylamino)ethyl)amino)-4-pyridinyl)-
  1,3-thiazol-4-yl)-2-methyl-6-oxo-1,6-dihydropyridine-3-
  carboxylate;
Ethyl 5-(2-\{2-\{(fur-2-ylmethyl)-amino\}-pyridin-4-yl\}-
  thiazol-4-yl)-2-methyl-6-oxo-1,6-dihydropyridine-3-
  carboxylate;
Ethyl 5-\{2-[2-(2-thien-2-yl-ethylamino)-pyridin-4-yl]-
   thiazol-4-yl}-2-methyl-6-oxo-1,6-dihydropyridine-3-
   carboxylate;
Ethyl 5-[2-(2-butylamino-pyridin-4-yl)-thiazol-4-yl]-2-
   methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
Ethyl 5-{2-[2-(carbamoylmethyl-amino)-pyridin-4-yl]-thiazol-
   4-y1}-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
Ethyl 5-{2-[2-acetylamino-ethylamino)-pyridin-4-yl]-thiazol-
   4-yl}-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
5-{2-[2-(Cyclopropylmethylamino)-pyridin-4-yl]-thiazol-4-
   yl}-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylic acid
   cyclopropyl-methyl amide;
Ethyl 5-{2-[2-(cyclopropylmethyl-amino)-pyridin-4-yl]-
   thiazol-4-yl}-2-methyl-6-oxo-1,6-dihydropyridine-3-
   carboxylate;
5-{2-[2-(Cyclopentyl)methylamino-pyridin-4-yl]-thiazol-4-
   yl}-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
5-{2-[2-(4-Methoxybenzylamino)-pyridin-4-yl]-thiazol-4-yl}-
   2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylic acid 4-
   methoxy-benzylamide;
Ethyl 2-methyl-6-oxo-5-(2-(2-amino-4-pyridinyl)-1,3-thiazol-
   4-yl)-1,6-dihydropyridine-3-carboxylate;
 Ethyl 2-methyl-5-[2-(methylamino)(1,3-thiazol-4-yl)]-6-oxo-
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1,6-dihydropyridine-3-carboxylate;

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6-Methyl-3-(2-(4-pyridyl)(1,3-thiazol-4-yl))hydropyridin-2-
  one;
Ethyl 2-methyl-5-(2-(2-(methyloxy)-4-pyridinyl)-1,3-thiazol-
  4-yl)-6-oxo-1,6-dihydropyridine-3-carboxylate;
Ethyl 2-methyl-6-oxo-5-{2-[(phenylsulfonyl)methyl](1,3-
  thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;
Ethyl 2-methyl-6-oxo-5-(2-(4-pyridyl)(1,3-thiazol-4-yl))-
  1,6-dihydropyridine-3-carboxylate;
Ethyl 2-methyl-6-oxo-5-{2-[(2-pyridylsulfonyl)methyl](1,3-
   thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;
Ethyl 2-methyl-5-(2-(1-methyl-1-(phenylsulfonyl)ethyl)-1,3-
   thiazol-4-yl)-6-oxo-1,6-dihydropyridine-3-carboxylate;
Ethyl 2-cyclopropyl-6-oxo-5-(2-(4-pyridinyl)-1,3-thiazol-4-
   yl)-1,6-dihydropyridine-3-carboxylate;
Ethyl 2-cyclopropyl-6-oxo-5-(2-((phenylsulfonyl)methyl)-1,3-
   thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;
5-Bromo-6-methyl-3-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-2(1H)-
   pyridinone;
Ethyl 2-methyl-5-(2-(2-(methylamino)-4-pyridinyl)-1,3-
   thiazol-4-yl)-6-oxo-1,6-dihydropyridine-3-carboxylate
5-Amino-6-ethyl-3-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-2(1H)-
   pyridinone;
6-Methyl-3-(2-(2-(2-pyridinylmethyl)amino)-4-pyridinyl)-
   1,3-thiazol-4-yl)-2(1H)-pyridinone;
Ethyl 2-methyl-6-oxo-5-(2-(2-((2-pyridinylmethyl)amino)-4-
   pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-
   carboxylate;
Ethyl 5-[2-(methylamino-pyridin-4-yl)-thiazol-4-yl]-2-
   isopropyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
1,1-Dimethylethyl 2-methyl-6-oxo-5-(2-(4-pyridinyl)-1,3-
   thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;
2-(1-Pyrrolidinyl)ethyl 2-ethyl-6-oxo-5-(2-(4-pyridinyl)-
   1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;
 6-Ethyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1H-pyridin-2-one;
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- 6-Isopropyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1H-pyridin-2-one;
- 3-(Diethylamino)propyl 2-ethyl-6-oxo-5-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;
- 3-(Diethylamino)propyl 2-(1-methylethyl)-6-oxo-5-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate; and
- 5-Hydroxymethyl-6-methyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1H-pyridin-2-one.
- 33. (Amended) A Compound of Claim 27 and pharmaceutically acceptable derivatives salts thereof selected from:
 - 6-Isopropyl-5-methyl-3-(2-pyrindin-4-yl-thiazol-4-yl)-1H-pyridin-2-one;
 - 3-(2-Benzenesulfonylmethyl-thiazol-4-yl)-6-isopropyl-5-methyl-1H-pyridin-2-one;
 - 6-Ethyl-5-isopropionyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1H-pyridin-2-one;
 - 3-(2-Benzenesulfonylmethyl-thiazol-4yl)-6-ethyl-5-propionyl-1H-pyridin-2-one;
 - 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-pyrrolidin-1-yl-ethyl ester;
 - 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-(2-oxo-pyrrolidin-1-yl)-ethyl ester;
 - 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-diethylamino-ethylester:
 - 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6dihydro-pyridine-3-carboxylic acid 1-ethyl-piperidin-3-yl ester;

- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 1-methyl-piperidin-3-yl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-dimethylamino-1-methyl-ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-diethylamino-1-methyl-ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-(benzyl-methyl-amino)-ethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 1-methyl-piperidin-4-yl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-(2-oxo-pyrrolidin-1-yl)-propyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid phenethyl ester;
- 2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-dihydro-pyridine-3-carboxylic acid 2-thiophen-2-yl-ethyl ester;
- 5-(2-Benzenesulfonylmethyl-thiazol-4-yl)-2-isopropyl-6-oxo-1,6-pyridine-3-carboxylic acid 2-diethylamino-ethyl ester;
- 5-(2-Benzenesulfonylmethyl-thiazol-4-yl)-2-isopropyl-6-oxo-1,6-pyridine-3-carboxylic acid 2-diethylamino-1-methylethyl ester;
- 5-(2-Benzenesulfonylmethyl-thiazol-4-yl)-2-isopropyl-6-oxo-1,6-pyridine-3-carboxylic acid 2-diethylamino-propyl ester;

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5-(2-Benzenesulfonylmethyl-thiazol-4-yl)-2-isopropyl-6-oxo-
   1,6-pyridine-3-carboxylic acid 2-(1-methyl-pyrrolidin-2-
   yl)-ethyl ester;
2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-
   dihydro-pyridine-3-carboxylic acid methyl ester;
2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-
   dihydro-pyridine-3-carboxylic acid propyl ester;
2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-
   dihydro-pyridine-3-carboxylic acid butyl ester;
2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-
   dihydro-pyridine-3-carboxylic acid isobutyl ester;
2-Isopropyl-6-oxo-5-(2-pyridin-4-yl-thiazol-4-yl)-1,6-
   dihydro-pyridine-3-carboxylic acid sec-butyl ester;
5-{[(2-Diethylamino-ethyl)-methyl-amino]-methyl}-6-ethyl-3-
    (2-pyridin-4-yl-thiazol-4-yl)-1H-pyridin-2-one;
5-[2-(2-Dimethylamino-pyridin-4-yl)-thiazol-4-yl]-2-
    isopropyl-6-oxo-1,6-dihydro-pyridine-3-carboxylic acid
    ethyl ester;
Ethyl 2-ethyl-6-oxo-5-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-
   1,6-dihydropyridine-3-carboxylate;
Ethyl 2-ethyl-6-oxo-5-{2-[(thienylsulfonyl)methyl](1,3-
   thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;
Ethyl 2-ethyl-6-oxo-5-{2-[(phenylsulfonyl)methyl](1,3-
   thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;
Ethyl 2-isopropyl-6-oxo-5-(2-(4-pyridyl)(1,3-thiazol-4-yl)-
   1,6-dihydropyridine-3-carboxylate;
 Ethyl 2-isopropyl-6-oxo-5-{2-[(thienylsulfonyl)methyl](1,3-
   thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;
 Ethyl 2-isopropyl-6-oxo-5-{2-[(phenylsulfonyl)methyl](1,3-
    thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;
 Ethyl 2-propyl-6-oxo-5-(2-(4-pyridyl)(1,3-thiazol-4-yl)-1,6-
   dihydropyridine-3-carboxylate;
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- Ethyl 2-propyl-6-oxo-5-{2-[(phenylsulfonyl)methyl](1,3thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate; Ethyl 2-propyl-6-oxo-5-{2-[(thienylsulfonyl)methyl](1,3thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate; Ethyl 6-oxo-2-[(phenylmethoxy)methyl]-5-(2-(4-pyridyl)(1,3thiazol-4-yl))-1,6-dihydropyridine-3-carboxylate; Ethyl 6-oxo-2-[(phenylmethoxy)methyl]-5-{2-[(phenylsulfonyl)methyl](1,3-thiazol-4-yl)}-1,6dihydropyridine-3-carboxylate; Ethyl 2-methyl-6-oxo-5-{2-[(2-thienylsulfonyl)methyl](1,3thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate; Ethyl 5-[2-({[(4-fluorophenyl)methyl]sulfonyl}methyl)(1,3thiazol-4-yl)]-2-methyl-6-oxo-1,6-dihydropyridine-3carboxylate; Ethyl 5-[2-({[(4-fluorophenyl)methyl]sulfonyl}methyl)(1,3thiazol-4-yl)]-2-methyl-6-oxo-1,6-dihydropyridine-3carboxylate; Ethyl 2-methyl-6-oxo-5-{2-(phenylthiomethyl)(1,3-thiazol-4yl)}-1,6-dihydropyridine-3-carboxylate; Ethyl 5-[2-(2-ethyl(4-pyridyl))(1,3-thiazol-4-yl)-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate; Ethyl 5-[2-(2-chloro(4-pyridyl))(1,3-thiazol-4-yl)-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate; Ethyl 5-[2-(3,5-Dichloro-pyridin-4-yl)-thiazol-4-yl]-2methyl-6-oxo-1,6-dihydropyridine-3-carboxylate; Ethyl 2-methyl-5-(2-(2-((2-methylpropyl)amino)-4-pyridinyl)-1,3-thiazol-4-yl)-6-oxo-1,6-dihydropyridine-3carboxylate; Ethyl 2-methyl-6-oxo-5-(2-(2-((3-pyridinylmethyl)amino)-4pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3carboxylate;
 - Ethyl 2-methyl-6-oxo-5-(2-(2-((phenylmethyl)amino)-4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;

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Ethyl 2-methyl-5-(2-(2-((2-((1-
  methylethyl)amino)ethyl)amino)-4-pyridinyl)-1,3-thiazol-
  4-y1)-6-oxo-1,6-dihydropyridine-3-carboxylate;
Ethyl 5-(2-(2-((2-(diethylamino)ethyl)amino)-4-pyridinyl)-
  1,3-thiazol-4-yl)-2-methyl-6-oxo-1,6-dihydropyridine-3-
   carboxylate;
Ethyl 5-(2-\{2-\{(fur-2-ylmethyl)-amino\}-pyridin-4-yl\}-
   thiazol-4-yl)-2-methyl-6-oxo-1,6-dihydropyridine-3-
   carboxylate;
Ethyl 5-{2-[2-(2-thien-2-yl-ethylamino)-pyridin-4-yl]-
   thiazol-4-yl}-2-methyl-6-oxo-1,6-dihydropyridine-3-
   carboxylate;
Ethyl 5-[2-(2-butylamino-pyridin-4-yl)-thiazol-4-yl]-2-
   methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
Ethyl 5-{2-[2-(carbamoylmethyl-amino)-pyridin-4-yl]-thiazol-
   4-yl}-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
Ethyl 5-{2-[2-acetylamino-ethylamino)-pyridin-4-yl]-thiazol-
   4-y1}-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate;
 5-{2-[2-(Cyclopropylmethylamino)-pyridin-4-yl]-thiazol-4-
   yl}-2-methyl-6-oxohydro-pyridine-3-carboxylic acid
    cyclopropyl-methyl amide;
 Ethyl 5-{2-[2-(cyclopropylmethyl-amino)-pyridin-4-yl]-
    thiazol-4-yl}-2-methyl-6-oxo-1,6-dihydropyridine-3-
    carboxylate;
 Ethyl 5-{2-[2-(cyclopentyl)methylamino-pyridin-4-yl]-
    thiazol-4-yl}-2-methyl-6-oxo-1,6-dihydropyridine-3-
    carboxylate;
 Ethyl 2-methyl-6-oxo-5-(2-(2-(amino)-4-pyridinyl)-1,3-
    thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate;
 Ethyl 2-methyl-5-[2-(methylamino)(1,3-thiazol-4-yl)]-6-oxo-
    1,6-dihydropyridine-3-carboxylate;
 Ethyl 2-methyl-6-oxo-5-{2-[(phenylsulfonyl)methyl](1,3-
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thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate;

Ethyl 2-methyl-6-oxo-5-(2-(4-pyridyl)(1,3-thiazol-4-yl))-1,6-dihydropyridine-3-carboxylate; Ethyl 2-methyl-6-oxo-5-{2-[(2-pyridylsulfonyl)methyl](1,3thiazol-4-yl)}-1,6-dihydropyridine-3-carboxylate; Ethyl 2-methyl-5-(2-(1-methyl-1-(phenylsulfonyl)ethyl)-1,3thiazol-4-yl)-6-oxo-1,6-dihydropyridine-3-carboxylate; Ethyl 2-cyclopropyl-6-oxo-5-(2-((phenylsulfonyl)methyl)-1,3thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate; 5-Bromo-6-methyl-3-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-2(1H)pyridinone; Ethyl 2-methyl-5-(2-(2-(methylamino)-4-pyridinyl)-1,3thiazol-4-yl)-6-oxo-1,6-dihydropyridine-3-carboxylate; pyridinylmethyl)amino)-4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxamide; Ethyl 2-methyl-6-oxo-5-(2-(2-((2-pyridinylmethyl)amino)-4pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3carboxylate; Ethyl 5-[2-(methylamino-pyridin-4-yl)-thiazol-4-yl]-2isopropyl-6-oxo-1,6-dihydropyridine-3-carboxylate; 1,1-Dimethylethyl 2-methyl-6-oxo-5-(2-(4-pyridinyl)-1,3thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate; 2-(1-Pyrrolidinyl)ethyl 2-ethyl-6-oxo-5-(2-(4-pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate; 6-Ethyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1H-pyridin-2-one; 6-Isopropyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1H-pyridin-2one; 3-(Diethylamino)propyl 2-ethyl-6-oxo-5-(2-(4-pyridinyl)-1,3thiazol-4-yl)-1,6-dihydropyridine-3-carboxylate; and 3-(Diethylamino)propyl 2-(1-methylethyl)-6-oxo-5-(2-(4pyridinyl)-1,3-thiazol-4-yl)-1,6-dihydropyridine-3carboxylate.

In re application of: Wenge ZHONG, et al. Application No. 10/736,289

34. (Amended) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and <u>an effective amount of</u> a compound of Claim

1 or a pharmaceuticaly acceptable salt thereof.

35. - 39. (Withdrawn)